

Claims

What is claimed is:

1. An evaporation device for evaporating volatile substances such as aromatics and/or insecticides comprising:

a housing;

a receptacle arrangement carried by the housing having two receiving chambers for substances to be evaporated;

wicks inserted into the receiving chambers having wick ends protruding from the receiving chambers;

a heater arrangement carried in the housing for providing heat to wick end evaporation areas of the protruding wick ends for evaporation;

at least one blower for generating a targeted air stream; and

a control unit for controlling the heater arrangement to evaporate the substances and for controlling the blower to be switched on at defined evaporation times.

2. The device of claim 1 wherein the blower is associated with a wick end evaporation area; and the blower generates a targeted air stream entraining the evaporated substance at the wick end evaporation area and conveys the substance to an air outlet of the housing.

3. The device of claim 2 including a plurality of blowers wherein a separate blower is associated with each wick end evaporation area so that a targeted air stream is supplied to each evaporation area when the associated blower is switched

on.

4. The device of claims 1 wherein the air stream is directed so that it does not impinge directly upon the heater arrangement but, advantageously, impinges upon one of the evaporated substances and the wick end evaporation areas protruding from the heater arrangement.

5. The device of claims 1 including a housing wall for at least partially enclosing the blower in a partial housing area; and an air stream passage opening defined in the housing area for directing the air stream on the wick end evaporation area.

6. The device of claim 5 wherein the housing wall forms a tapered nozzle for the air stream passage.

7. The device of claims 1 wherein the heater arrangement includes a heating block having an individual heating block area for each wick end.

8. The device of claim 7 wherein the individual heating block areas are thermally isolated from each other by at least one air gap between the individual heating block areas.

9. The device of claim 8 wherein each heating block area has a wick passage through which an associated wick end protrudes.

10. The device of claim 9 wherein each heating block area has assigned at least one electrical heating element controllable by means of the control unit.

11. The device of claims 1 wherein the heater arrangement is formed by individual heaters at a distance from each other and one of the heaters is assigned to each wick end.

12. The device of claim 11 wherein the heater arrangement includes a heater block having wick passages through which the assigned wick ends protrude.
13. The device of claim 11 where the heaters include an electrical resistance heating element controllable by the control unit.
14. The device of claim 1 wherein the control unit includes a timer switch device and a programmable microprocessor coupled with the timer device and integrated into the housing.
15. The device of claim 1 wherein the control unit includes a manual switch arrangement for switching the heater arrangement and the blower, and a timer switch device coupled with the manual switch arrangement so that upon actuation of the heater arrangement the blower can be switched on for a prescribed time.
16. The device of claim 15 wherein the manual switch arrangement includes a manual heater switch switching on the heater arrangement and a manual blower switch for switching on the blower.
17. The device of claim 16 wherein the control unit controls the heater arrangement to provide that no substance is evaporated, that one substance is evaporated, or that several substances are evaporated at the same time.
18. The device of claim 15 wherein the manual switch arrangement has a manual blower switch for controlling the blower in combination with the timer device to be on for a prescribed evaporation time when the heater arrangement is switched on.
19. The device of claim 1 including:

a partial housing heating area defined by at least one interior housing wall;

a wick end heating area generally enclosed within the housing heating area;

the heating arrangement and wick end being disposed in the wick end heating and housing heating area; and

the housing heating area having a ventilation slot for releasing the evaporated substance.

20. The device of claim 19 wherein the ventilation slot of the housing heating area is formed in the housing wall and opens into the air stream passage; and including a mixing chamber in which the air stream impinges upon said evaporated substance and is mixed for delivery of the substance to an air outlet of the housing.

21. The device of claim 1 wherein the receptacle arrangement is formed by one of several separate receptacles which provide the receiving chambers and by a single receptacle having a plurality of receiving chambers.

22. The device of claim 1 including one of a connection plug integrated with the house and a connection plug coupled with via a cable to power the heating arrangement and blower.

23. The device of claim 1 wherein the heater arrangement has at least one heating element arranged in the housing so that the air stream generated by the blower is heated to create a hot air stream that impinges upon a wick end protruding from a

receptacle for a substance to be evaporated.

24. The device of claim 1 including two receiving chambers, an aromatic contained in a first receiving chamber, and an insecticide contained in a second receiving chamber; and that the heater arrangement is controlled by the control unit, having a timer switch device so that the aromatic and the insecticide are periodically and alternately evaporated for a period of time prescribed by the timer device.

25. The device of claim 24 wherein the blower is switched on for a prescribed period of time defined by the timer device at the corresponding switchover time.

26. The device of claim 1 including two receiving chambers, a first insecticide contained in a first receiving chamber, a second insecticide contained in a second receiving chamber, the second insecticide being different from the first insecticide, and the heater arrangement is controlled by the control unit having a timer switch device so that the two insecticides are periodically and alternately evaporated for a period of time prescribed by the timer device.

27. An evaporation device for evaporating volatile substances such as aromatics and/or insecticides comprising:

a housing;

a receptacle arrangement carried by the housing having two receiving chambers for substances to be evaporated;

wicks inserted into the receiving chambers having wick ends protruding from the receiving chambers;

a heater arrangement carried in the housing for providing heat to the protruding wick ends;

at least one blower for generating a targeted air stream;

a control unit for controlling the heater arrangement to evaporate the substances and for controlling the blower to be switched on at defined evaporation times; and

at least one interior housing wall at least partially separating the air stream and the heating arrangement to avoid cooling of the heating arrangement.

28. The device of claim 27 including a mixing chamber disposed in the housing above the interior housing wall in which said evaporated substance and the air stream mix before exiting the housing.

29. An evaporation device for evaporating volatile substances such as aromatics and/or insecticides comprising:

a housing;

a receptacle arrangement carried by the housing having two receiving chambers for substances to be evaporated;

wicks inserted into the receiving chambers having wick ends protruding from the receiving chambers;

a heater arrangement carried in the housing for providing heat to the protruding wick ends;

at least one blower for generating a targeted air stream;

a control unit for controlling the heater arrangement to evaporate the substances and for controlling the blower to be switched on at defined evaporation times; and

at least one tapered interior wall forming a nozzle passage and opening in the housing through which the air stream passes.

at least one interior housing wall at least partially separating the air stream and the heating arrangement to avoid cooling of the heating arrangement.

30. The device of claim 29 including a mixing chamber disposed at the exit of the nozzle passage in the housing and above the heating arrangement in which said evaporated substance and the air stream mix before exiting the housing